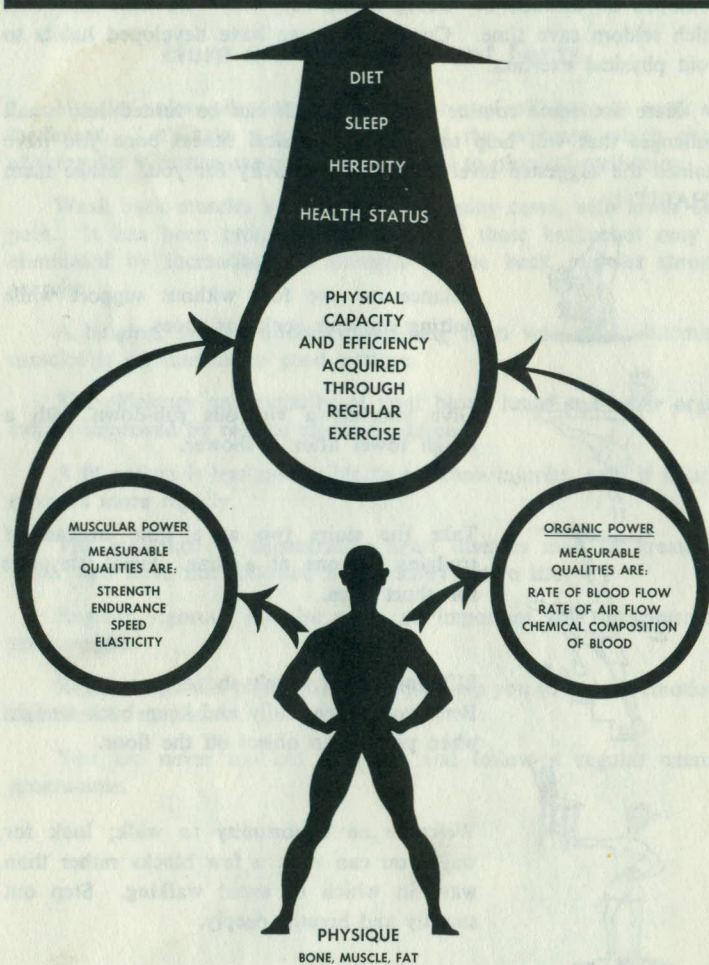


PHYSICAL FITNESS



Physical Fitness

The human body is made up mainly of bone, muscle and fat. Some 639 different muscles account for about 45% of the body weight. Each of these muscles has four distinct and measurable qualities which are of interest to us.

- (1) It can produce force which can be measured as **strength** of muscle.
- (2) It can store energy which permits it to work for extended periods of time independent of circulation. This is generally referred to as **muscular endurance**.
- (3) It can shorten at varying rates. This is called **speed of contraction**.
- (4) It can be stretched and will recoil. This is called the **elasticity** of muscle.

The combination of these four qualities of muscle is referred to as **MUSCULAR POWER**.

If muscles are to function efficiently, they must be continually supplied with energy fuel. This is accomplished by the blood which carries the energy fuel from lungs and digestive system to the muscles. The blood is forced through the blood vessels by the heart. The combined capacity to supply energy fuels to the working muscles is called **ORGANIC POWER**.

The capacity and efficiency with which your body can function depends on the degree of development of both your muscular and organic power through regular exercise. However, the level to which you can develop these powers is influenced by such factors as the type of body you inherit, the food you eat, presence or absence of disease, rest and sleep.

You are physically fit only when you have adequately developed your muscular and organic power to perform with the highest possible efficiency.